

REMARKS

Claims 1-40 and 42 are pending with claims 8, 10, 12-14, 16, 18, 28, 30, 32-34, 36 and 38 being withdrawn by the Examiner on the basis of a restriction requirement. Claim 41 is canceled, claims 1, 4, 6, 20, 21, 26 and 40 are amended, and claim 42 is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

Restriction Requirement

The Examiner reiterated the previous restriction requirement, withdrew claims 8, 10, 12-14, 16, 18, 28, 30, 32-34, 36, 38 and 41 from examination, and made the restriction requirement final. Applicant requests rejoinder of at least withdrawn claims 8, 10, 12-14, 16, 18, 28, 30, 32-34, 36 and 38 upon allowance of the non-withdrawn claims.

35 U.S.C. § 102 Rejection

Claims 1-7, 11, 15, 17, 19-27, 31, 35, 37, 39 and 40 were rejected under 35 U.S.C. § 102(b) for being allegedly anticipated by U.S. Patent No. 3,318,244 to ROSTOCIL. This rejection is respectfully traversed.

In order to establish a *prima facie* case of anticipation under 35 U.S.C. § 102, a single prior art reference must disclose each and every element as set forth in the subject claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). Applicant respectfully submits that a *prima facie* case of anticipation cannot be established because ROSTOCIL fails to teach each and every element of the claims.

More particularly, independent claim 1 recites, *inter alia*,

a metal liner between the shaped charge and the projectile, the metal liner forming a jet of liner material on detonation of the shaped charge to impact a rear of the projectile and propel the projectile.

Additionally, independent claim 21 recites, *inter alia*,

a metal layer lining an interior of the internal cavity in the shaped charge, wherein, on detonation of the charge, the metal liner forms a jet of molten liner material that impacts the rear face of the projectile and propels the projectile.

Applicant submits that ROSTOCIL does not disclose or even suggest at least these features.

Applicant acknowledges that e.g., Fig. 1 of ROSTOCIL discloses a projective 16, a sabot element 10 arranged at a rear end of the projectile 16, and an explosive charge 9. However, the Examiner is not correct that the sabot element 10 of ROSTOCIL is properly characterized as the recited metal liner of claims 1 and 21. As the Examiner knows, claim 1 recites that the metal liner forms a jet of liner material on detonation of the shaped charge to impact a rear of the projectile and propel the projectile. Furthermore, claim 21 similarly recites that the metal liner forms a jet of liner material on detonation of the shaped charge to impact a rear of the projectile and propel the projectile. To the contrary, Fig. 9 of ROSTOCIL clearly shows that the sabot element 10 remains intact upon detonation and does not reach a molten state or transform into a jet of liner material. Indeed, the language of col. 3, lines 29-47 of ROSTOCIL clearly implies that ROSTOCIL aims to protect the sabot element 10 from any damage during detonation of the charge 9 which would obviously preclude it from reaching a molten state or transforming into a jet of liner material.

Thus, Applicant respectfully submits that independent claims 1 and 21, as well as the claims which depend therefrom, are allowable.

Accordingly, Applicant respectfully requests that the above-noted rejection under 35 U.S.C. § 102(b) should be withdrawn.

35 U.S.C. § 103 Rejections

Claims 9 and 29 were rejected under 35 U.S.C. § 103(a) for being allegedly unpatentable over ROSROCIL in view of US Patent No. 4,700,630 to SULLIVAN. This rejection is respectfully traversed.

The Examiner acknowledges that ROSROCIL fails to disclose, among other things, the features recited in the above-noted dependent claims. However, the Examiner explains that such features are taught in SULLIVAN and that it would have been obvious to combine the teachings of these documents. Applicant respectfully submits that a *prima facie* case of obviousness has not been established as the applied reference fail to teach each and every element of the claims.

As explained above, whereas the invention provides for a metal liner that forms a jet of liner material on detonation of the shaped charge to impact a rear of the projectile and propel the projectile (claim 1) and a metal liner forms a jet of liner material on detonation of the shaped charge to impact a rear of the projectile and propel the projectile (claim 21), Fig. 9 of ROSTOCIL clearly shows that the sabot element 10 (which the Examiner identifies as the metal liner) remains intact upon detonation and does not reach a molten state or transform into a jet of liner material. Again, the language of col. 3, lines 29-47 of ROSTOCIL clearly implies that ROSTOCIL aims to protect the sabot element 10 from any damage during detonation of the

charge 9 which would obviously preclude it from reaching a molten state or transforming into a jet of liner material.

SULLIVAN does not cure the deficiencies of ROSTOCIL. Applicant acknowledges that SULLIVAN teaches a bullet having outer grooves. However, the Examiner has not demonstrated, much less alleged, that SULLIVAN, discloses or suggest a metal liner forming a jet of liner material on detonation of the shaped charge to impact a rear of the projectile and propel the projectile (claim 1) and/or a metal liner forming a jet of liner material on detonation of the shaped charge to impact a rear of the projectile and propel the projectile.

Accordingly, Applicant submits that no proper combination of ROSTOCIL and SULLIVAN discloses or suggests the combination of features recited in at least claims 1 and 21.

Moreover, in addition to failing to disclose the combination of features recited in the above-noted claims 1 and 21, Applicant submits no proper combination of these documents discloses or suggests the combination of features recited in dependent claims 9 and 29, which also respectfully contains all of the features of claims 1 and 21, respectively.

Accordingly, Applicant respectfully submits that the above-noted rejection under 35 U.S.C. § 103(a) should be withdrawn.

Request for Rejoinder of Non-Elected Claims

Applicant submits that rejoinder of withdrawn claims 8, 10, 12-14, 16, 18, 28, 30, 32-34, 36 and 38 is now proper. At the very least, claims 8, 10, 12-14, 16, 18, 28, 30, 32-34, 36 and 38 should be rejoined because these claims depend from claims 1 and/or 21 which are believed to be allowable. Applicant refers the Examiner to MPEP 821.04 which indicates that withdrawn

claims which depend from or otherwise include all the limitations of the allowable claims will be rejoined if presented prior to allowance and issuance of a final rejection. Accordingly, Applicant requests that the Examiner rejoin all the withdrawn claims directed to the non-elected invention and consider the merits of the same.

New Claims are also Allowable

Applicant submits that the new claim 42 is allowable over the applied art of record. Specifically, claim 42 recites a combination of features which are clearly not disclosed or suggested by the applied art of record. Accordingly, Applicant respectfully requests consideration of this claim and further requests that the above-noted claim be indicated as being allowed.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. Any fees required for consideration of the instant response are hereby authorized to be charged to our Deposit Account No. 19-0089.

The Examiner is invited to contact the undersigned at the telephone number listed below, if needed.

Respectfully submitted,
R. W. R. URWIN

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', written over a horizontal line.

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